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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/783,478

Applicant(s)

MCGIFFIN ET AL.

Examiner

CHARLES C. AGWUMEZIE

Art Unit

3685

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14, 16-27 and 29-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14, 16-27, and 29-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draft Person's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date see continuation
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

03/07/05; 02/06/07; 03/10/08; and 4/22/08

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 24, 2010 has been entered.

Acknowledgments

2. Applicants' amendment filed on March 24, 2010 is acknowledged. Accordingly claims 1-12, 14, 16-27, and 29-31 remain pending.

Response to Arguments

3. Applicant's arguments filed March 24, 2010 have been fully considered but they are not persuasive.

4. With respect to the rejections under 35 U.S.C. § 101 of Claims 1-12, 14, 16-19, 20, 22-26, and 21, 27, 29-31, Applicant argues that the Examiner is in error in holding these claims and their associated dependent claims as being directed to non-statutory subject matter, because each of the independent claims explicitly recites for example a data structure, generated by a processor executing a first of instruction that cause the processor to store the data structure in the computer readable memory (claim 1); a

computer system for storing and processing account related information by an application program comprising a first set and a second set of instructions executable by a processor coupled to one or more computer-readable... (claim 20), a method for storing and processing account-related information in a data structure on one or more computer readable memories using a first set and a second set of instructions stored in at least one of the one or more computer readable-memories and executable by a processor...claim 21

In response Examiner respectfully disagrees and submits that independent claims 1 and 20 constitutes data structures representing descriptive material per se and/or computer programs representing computer listings per se and for these reasons are non statutory subject matter because they are incapable of causing functional change in the computer. The claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. The claimed data structure at best presents a listing of data stored in a memory medium or "data gathering" (as described in the 101 guidelines). *See Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760. (claim to a data structure per se held nonstatutory). Furthermore the body of the claims should be written in the language that shows the actual steps of what a computer is doing rather than listing data stored in a computer. For example using word like retrieving, providing, determining, executing in the body of the claim in order to show what the computer is doing. Accordingly claims 1-12, 14, 16-19, 20-28 and 29-31 are properly rejected under 35 U.S. C §101.

5. With respect to **claims 1-12, 14, and 16-26**, Applicant argues that Dimitrios, in combination with Bosco and Guy does not teach or suggest the amended independent claim 1, element (a)(iv), recites "a first account role for the first customer data object with respect to the first account ID [and] a second account role for the first customer data object with respect to the first account ID." That claim 1 further recites "multiple different roles for the customer identified by the first customer ID with respect to the account ID identified by the first account ID." That claim 1 clearly recites features that establish multiple different roles (e.g., a first account role and a second account role) for a customer identified by a customer ID (e.g., the first customer ID) with respect to a single account.

In response, Examiner respectfully disagrees and submits that the combination of Dimitrios, Bosco and Guy does disclose multiple concise account level decision relationships used to construct multiple concise account level decision queries used to perform account level decision analysis as shown in the rejections. For example Bosco clearly discloses account role which establishes an insured person's role on a specific account. Bosco further discloses that the entities and relationships are then analyzed so as to produce a second level model. Guy discloses multiple different roles for a customer as recited in claims 1 and 20. Accordingly the combination of Dimitrios, Bosco and Guy does disclose multiple concise account level decision relationships used to construct multiple concise account level decision queries used to perform account level decision analysis.

6. Applicant further argues that claim 1 elements (a)(i)-(iv) recites at least two features that Dimitrios alone or in combination with Bosco and Guy does not teach or suggest.

7. Firstly, Applicant argues that Guy fails to teach element (a)(iv) of claim 1. Specifically that Guy fails to disclose establishing multiple different roles for a customer identified by a customer ID with respect to a single account as recited in claim 1 element (a)(iv). That Guy teaches that roles may be assigned to each cardholder of a single account and also to each account held by a single customer, but does not teach that a single customer may have multiple roles for a single account.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "establishing multiple different roles for a customer identified by a customer ID with respect to a single account") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). There is no recitation in the claims that a single customer may have multiple roles for a single account. Accordingly Guy does disclose the claimed elements (a)(iv) of claim 1.

8. Secondly, Applicant argues that Dimitrios fails to teach element (a)(iii) of claim 1. Specifically that Dimitrios at least fails to teach the feature "a third account involvement that establishes a third relationship between the first customer data object and the first account data object, the third relationship being different from the first relationship" as

recited in claim 1, element (a)(iii). In other words, Applicants assert that Dimitrios fails to teach a feature where two different relationships are established between a single account and a single customer.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "a feature where two different relationships are established between a single account and a single customer") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Accordingly Dimitrios does disclose the claimed limitation. Even if it were to be found that Dimitrios does not disclose the claimed limitation then Guy discloses "a third account involvement that establishes a third relationship between the first customer data object and the first account data object, the third relationship being different from the first relationship." (See Guy fig. 2). Accordingly independent claim 1 and dependent claims 2, 4-6 and 8-12 which dependent from claim 1, are not patentable over Dimitrios-Bosco-Guy combination.

9. With respect to claim 20, Applicant argues that the features of claim 20 is similar to the features recited in claim 1 as amended and for at least the same reasons as in claim 1, claim 20 is patentable over the references.

In response, Examiner respectfully disagrees and submits that for at least the reasons given in regard to claim 1 above, claim 20 is not patentable over the references of record.

10. With respect to claims 22-26, Applicant argues that these claims dependent from claim 20 and therefore patentable over the references of record.

In response, Examiner disagrees and submits that these claims are neither patentable by virtue of their dependency from claim 20 nor for their own individual recited features.

11. With respect to claim 21, Applicant argues that the features of claim 21 is similar to the features recited in claim 1 as amended and for at least the same reasons as in claim 1, claim 21 is patentable over the references.

In response, Examiner respectfully disagrees and submits that for at least the reasons given in regard to claim 1 above, claim 21 is not patentable over the references of record.

12. Applicant further argues that claim 21 is independently patentable for additional reasons: cited references fail to teach the features "addressing risks to customers and accounts" as recited in claim 21. Specifically that the cited combination does not teach or suggest the type of risk described by claim 21 as amended. Dimitrios, Bosco, Guy, and Hele, alone or in any combination, do not teach or suggest "the risk data objects define risk factors associated with addressing risks to customers and accounts."

In response, Examiner respectfully disagrees and submits that Hele does disclose or suggest the "the risk data objects define risk factors associated with addressing risks to customers and accounts." For example Hele describes querying a user about risk during an evaluation for life insurance coverage and collecting information from the user and any other sources (0021, 0047) Hele further discloses, at

paragraphs [0080], [0096], and [0122]-[0123], that underwriting is a determination of the risk associated with insuring a particular user. Hele at [0118] indicates that the user may represent an unacceptable risk based on their financial situation, physical build, medical conditions, or participation in risky activities. If the above disclosures does not address risk associated with customer and account then what does it address. Examiner does not understand why the risk disclosed by Hele cannot be read to teach or suggest risk factors associated with addressing risks to customers as argued by the applicant.

13. Applicant further argues with respect to claim 21 that the Dimitrios-Bosco-Hele combination does not teach or suggest the type of risk described by claim 21 because the risk factors as claimed are from the perspectives of the customer and not the risks factors from the perspective of an institution that offers products and services to address the risks to the customer. That Dimitrios, Bosco and Hele, alone or in any combination, do not teach or suggest “the risk data objects define risk factors associated with addressing risks to customers and account.” That Hele may at best teach or suggest risks to an institution and the risk factors associated with insuring a customer by an institution.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., “the risk factors as claimed are from the perspectives of the customer and not the risks factors from the perspective of an institution that offers products and services to address the risks to the customer”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are

not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Examiner is unable to understand how the risk described by Hele is not associated with addressing risks to customer and account.

14. With respect to claims 27 and 29-31, Applicant argues that these claims are patentable being dependent from claim 21.

In response, Examiner respectfully disagrees and submits that claims 27 and 29-31 are neither patentable by virtue of their dependency from claim 21 nor for their individual recited features.

Examiner's recommendations

15. Examiner recommends that claim 1 preamble recite:

A computer-readable medium storing computer executable instructions that when executed by a processor causes the processor to generate a data structure based on a relational data model comprising:

The body of claim 1 should use words like: retrieving, providing, determining, executing in the body of the claim in order to show what the computer is doing. Ordinarily listing limitations or elements without functional relationships between different parts of the limitation or elements are insufficient for claim patentability. The same is applicable to claims 20 and 21.

Claim Rejections - 35 USC § 101

16. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

17. Claims 1-12, 14, 16-19, 20, 22-26, and 21, 27, 29-31 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. Although the claims recites data stored in a computer readable medium, the claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. These claims constitutes data structures representing descriptive material per se and/or computer programs representing computer listings per se and for these reasons are non statutory subject matter because they are incapable of causing functional change in the computer. Accordingly the claimed invention is directed to nonstatutory subject matter. See MPEP 2106.01.

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 1-2, 4-6, 8-12, 20, and 25-26, are rejected under 35 U.S.C. 103(a) as being unpatentable over Dimitrios et al U.S. Patent No. 5,659,723 in view of Bosco et al

U.S. Patent No. 5,191,522 and further in view of Guy et al (hereinafter "Guy") U.S. Patent No. 6,993,510.

20. As per **claim 1 and 20**, Dimitrios et al discloses a computer-readable medium memory comprising:

(a) a data structure, generated by a processor executing a first set of instructions that causes the processor to store the data structure in the computer readable memory, the data structure being based on a relational data model (*see fig. 10, which discloses E/R model database or memory*) and comprising:

(i) an account entity class that establishes multiple account data objects comprising:

a first account data object comprises a first account ID (*figs. 1 and 2; col. 6, lines 45-60; ..account id...; col. 3, lines 5-15; ...account entity...*); and

a second account data object that comprises a second account ID different than the first account ID (*figs. 1 and 2, fig.7, ...get next entity...; col. 6, lines 45-60; ..account id...; col. 3, lines 5-15; ..account entity...*)

(ii) a customer entity class that establishes multiple customer data objects, including:

a first customer data object that comprises a first customer ID (*figs. 1 and 2; col. 6, lines 45-60; ..account id...; col. 3, lines 5-15; ..customer entity...*); and

a second customer data object that comprises a second customer ID, the first customer ID and the second customer ID being different (*figs. 1 and 2; fig. 7, get next entity...; col. 6, lines 45-60; ..account id...; col. 3, lines 5-15; ...account entity...*);

(iii) an account involvement entity class that establishes account involvements comprising:

a first account involvement that establishes a first relationship between the first customer data objects and a first account data objects (*figs. 1 and 2; col. 6, lines 45-60; ..account id...; col. 3, lines 5-15; .. one or two entities involved in a relationship...*); and

a second account involvement that establishes a second relationship between the first customer data object and the first account data object, the third relationship being different from the first relationship (*figs. 1 and 2; col. 6, lines 45-60*);

wherein the account involvements establish relationships between first account data objects and the customer data objects and between the second account data object and the customer data objects (*figs. 1 and 2; col. 6, lines 45-60; ..account id...; col. 3, lines 5-15; .. one or two entities involved in a relationship...*).

21. What Dimitrios et al does not explicitly disclose:

(iv) an account role entity class that establishes an account role entity that defines:

a first account role for the first customer data object with respect to first account ID;

a second account role for the first customer data object with respect to the first account ID, the second account role different from the first account role, that establishes

multiple different roles for the customer identified by the first customer ID with respect to the account ID identified by the first account ID;

wherein the account entity class, the customer entity class, the account involvement entity class, the account involvements, and the account role entity class are established to form multiple concise account level decision relationships used to construct multiple concise account level decision queries used to perform account level decision analysis;

(v) an offering entity class that establishes multiple offering data objects;

(vi) an offering involvement entity class that establish a relationship between at least one of the customer data objects and one of the offering data objects, wherein the offering entity, class comprises a program entity class, wherein the program entity class establishes relationships between multiple service data objects and multiple product data objects; and

Wherein at least one of the multiple offering data objects defines an offering that comprises a product, the product being defined by at least one of the multiple product data objects and

(b) a second set of the instructions executed by the processor that causes the processor to construct the multiple concise account level decision queries using the multiple concise account level decision relationships and execute the multiple concise account level decision queries to obtain multiple concise account level decision query results used to perform account level decision analysis.

22. Bosco et al discloses

(iv) an account role entity class that establishes an account role entity that defines:

a first account role for the first customer data object with respect to first account ID (*figs. 5-6, insured role; col. 10, lines 35-50, which discloses an insured person's role on a specific case*);

wherein the account entity class, the customer entity class, the account involvement entity class, the account involvements, and the account role entity class are established to form multiple concise account level decision relationships used to construct multiple concise account level decision queries used to perform account level decision analysis (*see fig. 2, which discloses entity relationship model; col. 2, lines 50-65, which discloses that the relationships between entities are also identified and documented in the table format and entered into entity-to-entity relationship tables; col. 3, lines 5-15, which discloses that the entities and relationships are then analyzed so as to produce a second level model*);

(v) an offering entity class that establishes multiple offering data objects (*col. 20, lines 45-60, which discloses medical, Life, Dental, long term care, disability income, AD&D*);

(vi) an offering involvement entity class that establishes a relationship between at least one of the customer data objects and one of the offering data objects (*col. 20, lines 45-60; col. 20, lines 60-67, which discloses that each product sold is defined*),

wherein the offering entity, class comprises a program entity class, wherein the program entity class establishes relationships between multiple service data objects and multiple product data objects (*col. 20, lines 45-60*); and

(b) a second set of the instructions executed by the processor that causes the processor to construct the multiple concise account level decision queries using the multiple concise account level decision relationships and execute the multiple concise account level decision queries to obtain multiple concise account level decision query results used to perform account level decision analysis (*col. 3, lines 5-15, which discloses that the entities and relationships are then analyzed so as to produce a second level model*)

23. Guy discloses

a second account role for the first customer data object with respect to the second account ID, the second account role different from the first account role, that establishes multiple different roles for the customer identified by the first customer ID with respect to the account ID identified by the first account ID (*see fig. 2, which discloses multiple different roles for a customer...; col. 4, lines 15-60, which disclosesassigning a "role" to each cardholder. The roles may be relatively simple, such as "primary" and "secondary"....the customer ID and the presentation ID stored in the database 130 permit the roles for cardholders to be defined not only for each account, but also for all accounts for which a card has been issued to one customer...;*)

Accordingly it would have been obvious to one of ordinary skill in the art at time of applicants' invention to modify the method of Dimitrios et al and incorporate the method as described above in view of the teachings of Bosco et al and Guy respectively since the claimed invention is merely a combination of old and known elements and in the combination each element merely would have performed the same function as it did

separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

24. As per **claim 2**, Dimitrios et al further discloses the computer-readable memory, wherein the account entity class includes an account entity where the first set of instructions cause the processor to store the plurality of account data objects (col. 3, lines 5-15; ...account entity...).

25. As per **claim 4**, Dimitrios et al further discloses the computer-readable memory, wherein the account entity class further includes an account group entity that establishes a relationship among two or more of the plurality of account data objects (col. 3, lines 5-15).

26. As per **claims 3, and 7**, Dimitrios et al failed to explicitly disclose the computer-readable memory, wherein the account entity includes an account entity ID attribute as a primary key.

Bosco et al discloses the data structure, wherein the account entity includes an account entity ID attribute as a primary key (see fig. 10, primary key).

Accordingly it would have been obvious to one of ordinary skill in the art at time of applicant's invention to modify the method of Dimitrios et al and incorporate the data structure, wherein the account entity includes an account entity ID attribute as a primary key as taught by Bosco et al, in order to identify the account.

27. As per **claim 5**, Dimitrios et al failed to explicitly disclose the computer-readable memory, wherein the account group entity includes an account ID attribute defined as a foreign key.

Bosco et al discloses the data structure, wherein the account group entity includes an account ID attribute defined as a foreign key (see figs. 10; ...foreign key...). Accordingly it would have been obvious to one of ordinary skill in the art at time of applicant's invention to modify the method of Dimitrios et al and incorporate the data structure, wherein the account group entity includes an account ID attribute defined as a foreign key in view of the teachings of Bosco et al, in order to identify the account.

28. As per **claim 6**, Dimitrios et al further discloses the computer-readable memory, wherein the customer entity class includes a customer entity (col. 3, lines 5-15; ...customer entity...).

29. As per **claim 8**, Dimitrios et al further discloses the computer-readable memory, wherein the customer entity class includes a customer involvement entity class, which stores a customer involvement that establish one or more relationships among at least two of the plurality of customer data objects (figs. 1 and 2; col. 6, lines 45-60; ..account id...; col. 3, lines 5-15; .. one or two entities involved in a relationship...)

30. As per **claim 9**, Dimitrios et al further discloses the computer-readable memory, wherein the customer involvement entity class includes a customer involvement entity where the first set of instructions cause the processor to store the customer involvement (figs. 1 and 2; col. 6, lines 45-60; ..customer and account entity...; col. 3, lines 5-15; .. one or two entities involved in a relationship...).

31. As per **claim 10 and 12**, Dimitrios et al further discloses the computer-readable memory, wherein the customer involvement entity class comprises a customer role entity that the first set of instructions cause the processor to define a customer role for at least one of the plurality of customer data objects.

Bosco et al discloses the computer-readable memory, wherein the customer involvement entity class comprises a customer role entity that the first set of instructions cause the processor to define a customer role for at least one of the plurality of customer data objects (figs. 5-6, insured role; col. 10, lines 35-50, which discloses an insured person's role on a specific case).

Accordingly it would have been obvious to one of ordinary skill in the art at time of applicant's invention to modify the method of Dimitrios et al and incorporate the computer-readable memory, wherein the customer involvement entity class comprises a customer role entity that the first set of instructions cause the processor to define a customer role for at least one of the plurality of customer data objects in view of the teachings of Bosco in order to identify the customer.

32. As per **claim 11**, Dimitrios et al further discloses the computer-readable memory, wherein the account involvement entity class includes an account involvement entity where the first set of instructions causes the processor to store the account involvement (figs. 1 and 2; col. 6, lines 45-60; ..customer and account entity...; col. 3, lines 5-15; .. one or two entities involved in a relationship...).

33. As per **claim 13**, Dimitrios et al failed to explicitly disclose the computer-readable memory, further comprising:

an offering entity class for establishing multiple offering data objects; an offering involvement entity class establishing a relationship between at least one of the customer data objects and one of the plurality of offering data objects.

Bosco et al disclose the computer-readable memory, further comprising:

an offering entity class for establishing multiple offering data objects; an offering involvement entity class establishing a relationship between at least one of the customer data objects and one of the plurality of offering data objects (col. 20, lines 45-60, which discloses medical, Life, Dental, long term care, disability income, AD&D).

Accordingly it would have been obvious to one of ordinary skill in the art at time of applicant's invention to modify the method of Dimitrios et al and incorporate the computer-readable memory, an entity class establishing: multiple offering data objects; a third relationship between the customer data objects and the product data in view of the teachings of Bosco et al because it defines the service and products available through the system.

34. As per **claim 14**, Dimitrios et al failed to explicitly disclose the computer-readable memory, wherein the offering entity class comprises a service entity class that establishes the multiple service data objects.

Bosco discloses the computer-readable wherein the offering entity class comprises a service entity class that establishes the multiple service data objects (col. 20, lines 45-60, which discloses medical, Life, Dental, long term care, disability income, AD&D).

Accordingly it would have been obvious to one of ordinary skill in the art at time of applicant's invention to modify the method of Dimitrios et al and incorporate the computer-readable memory, wherein the offering entity class comprises a service entity class that establishes the multiple service data objects in view of the teachings of Bosco et al because it defines the service and products available through the system.

35. As per **claim 16-18**, Dimitrios et al failed to explicitly disclose the computer-readable memory, wherein the offering entity class comprises a program entity class, wherein the program entity class establishes relationships between multiple service data objects and multiple product data objects

Bosco et al further discloses the data structure, wherein the offering entity class comprises a program entity class, wherein the program entity class establishes relationships between multiple service data objects and multiple product data objects

(fig. 8; col. 20, lines 45-60, which discloses medical, Life, Dental, long term care, disability income, AD&D).

Accordingly it would have been obvious to one of ordinary skill in the art at time of applicant's invention to modify the method of Dimitrios et al and incorporate the computer-readable memory, wherein the offering entity class comprises a program entity class, wherein the program entity class establishes relationships between multiple service data objects and multiple product data objects in view of the teachings of Bosco et al because it defines the service and products available through the system.

36. As per claim 19, Dimitrios et al failed to explicitly disclose the computer-readable memory further comprising:

a provider entity class that establishes multiple provider data objects, wherein at least one of the multiple provider data objects comprises a team comprising team members; and

a task entity class that establishes multiple task data objects, which may be related to one or more of the provider data objects

Bosco further discloses computer-readable memory further comprising:

a provider entity class that establishes multiple provider data objects (fig. 9, producer); and

a task entity class for establishing multiple task data objects, wherein at least one task data object comprises assignments related to the account data objects for the team members, and wherein at least one of the task data objects comprises assignments

related to the customer data objects for the team members (col. 14, lines 1-10, which discloses role types of producers including writing agent, general agent, third party agent).

Accordingly it would have been obvious to one of ordinary skill in the art at time of applicant's invention to modify the method of Dimitrios et al and incorporate the computer-readable memory, wherein a provider entity class that establishes multiple provider data objects; and a task entity class for establishing multiple task data objects, which may be related to one or more of the provider data objects in view of the teachings of Bosco et al because it defines the service and products available through the system.

37. As per **claim 22, and 23**, Dimitrios et al failed to explicitly disclose system, wherein the account entity class establishes:

the account ID as a primary key; and

an account group entity that defines the account ID as a foreign key, and establishes a relationship among the account data objects.

Bosco et al discloses

the account ID as a primary key (see fig. 10, primary key); and

an account group entity that defines the account ID as a foreign key, and establishes a relationship among the account data objects (see fig. 10, foreign key)

Accordingly it would have been obvious to one of ordinary skill in the art at time of applicant's invention to modify the method of Dimitrios et al and incorporate the

computer-readable memory, wherein the customer involvement entity class includes a customer role entity that defines a customer role for at least one of the plurality of customer data objects in view of the teachings of Bosco in order to identify the account for quick access.

38. As per claim 24, Dimitrios et al failed to explicitly disclose the system, wherein the customer involvement entity defines a customer role for at least one of the customer data objects.

Bosco et al discloses the system, wherein the customer involvement entity defines a customer role for at least one of the customer data objects (col. 10, lines 35-50, which discloses that the same person may be insured on a single case both as a participant and as a dependent).

Accordingly it would have been obvious to one of ordinary skill in the art at time of applicant's invention to modify the method of Dimitrios et al and incorporate the the system, wherein the customer involvement entity defines a customer role for at least one of the customer data objects in view of the teachings of Bosco et al because allowing relationships to be defined across multiple accounts or linking account together.

39. As per claim 25 and 26, Dimitrios et al failed to explicitly disclose the system, further comprises:

(F) a first relationship between the customer data objects and the offering data objects.

a second relationship between the customer data objects and the service data objects

a third relationship between the customer data objects and the product data objects.

Bosco et al discloses

(E) an entity class establishing:

multiple offering data objects (col. 20, lines 45-60, which discloses medical, Life, Dental, long term care, disability income, AD&D);

multiple service data objects (col. 20, lines 45-60, which discloses medical, Life, Dental, long term care, disability income, AD&D); and

multiple product data objects (col. 20, lines 45-60, which discloses medical, Life, Dental, long term care, disability income, AD&D); and

(F) a first relationship between the customer data objects and the offering data objects (see fig. 2).

a second relationship between the customer data objects and the service data objects (see fig. 2)

a third relationship between the customer data objects and the product data objects (see fig. 2, which discloses relationship table).

Accordingly it would have been obvious to one of ordinary skill in the art at time of applicant's invention to modify the method of Dimitrios et al and incorporate the

system, an entity class establishing: multiple offering data objects; a third relationship between the customer data objects and the product data in view of the teachings of Bosco et al because allowing relationships to be defined across multiple accounts or linking account together.

40. **Claims 21, and 27-31**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Dimitrios et al U.S. Patent No. 5,659,723 and Bosco et al U.S. Patent No. 5,191,522, Guy et al (hereinafter "Guy") U.S. Patent No. 6,993,510 and further in view of Hele U.S. Patent Application Publication No. 2002/0111835 A1.

41. As per **claim 21**, Dimitrios et al discloses a method for storing and processing account-related information in a data structure on one or more computer readable memories using a first set and second set of instructions stored in at least one of the one or more computer-readable memories and executable by the processor coupled to the at least one of the one or more computer-readable memories, comprising:

(a) providing an account entity class for establishing in the data structure on the one or more computer readable memories multiple account data objects, comprising:

a first account data object comprises a first account ID (*figs. 1 and 2; col. 6, lines 45-60; ..account id...; col. 3, lines 5-15; ...account entity...; and*

a second account data object comprises a second account ID different than the, first account ID (*figs. 1 and 2; col. 6, lines 45-60; ..account id...; col. 3, lines 5-15; ..account entity...; and*

(b) providing a customer entity class that establishes, in the data structure on the one or more computer readable memories multiple customer data objects, comprising:

a first customer data object comprises a first customer ID (*figs. 1 and 2; col. 6, lines 45-60; ..account id...; col. 3, lines 5-15; ..customer entity...*); and

a second customer data object comprises a second customer ID, the first customer ID and the second customer ID being different (*figs. 1 and 2; col. 6, lines 45-60; ..account id...; col. 3, lines 5-15; ..customer entity...*);

(c) providing an account involvement entity class that establishes in the data structure on the one or more computer readable mediums multiple account involvements which establish relationships between the customer data objects and-account data objects(*figs. 1 and 2; col. 6, lines 45-60; ..account id...; col. 3, lines 5-15; .. one or two entities involved in a relationship...*).

42. What Dimitrios et al does not explicitly disclose is:

(d) providing an entity that defines multiple account roles, in the data structure on the one or more computer readable memories comprising:

a first account role for the first customer data object with respect to first account ID;

a second account role for the first customer data object with respect to the first account ID, the second account role different from the first account role, that establishes multiple different roles for the customer identified by the first customer ID with respect to the account ID identified by the first account ID; and

(e) providing a first entity class that establishes in the data structure on the one or more computer readable memories:

multiple risk data objects;

multiple product data Objects; and

multiple service data objects;

(f) providing a second entity class that establishes in the data structure on the one or more computer readable memories:

relationships between the risk data objects, the account data objects the customer data objects, the product data objects and the service data objects;

(g) providing a program entity class that establishes in the data structure on the one or more computer readable memories relationships between the service data objects, the product data objects and the risk data objects, wherein the risk data objects define risk factors associated with addressing risks to customers and accounts, comprising risk factors addressed by products; and risk factors addressed by services wherein the program entity class, account entity class, the customer entity class, the account involvement entity class, the account involvements, and the account role entity class are established to form multiple concise account level decision relationships used to construct multiple concise account level decision queries used to perform account level decision analysis; and

(h) constructing multiple concise account level decision queries using the multiple concise account level decision relationships

(i) performing account level decision analysis comprising:

executing the multiple concise account level decision queries from the data structure on the one or more computer readable memories.

43. Bosco et al discloses:

(iv) an account role entity class that establishes an account role entity that defines:

a first account role for the first customer data object with respect to first account ID (*figs. 5-6, insured role; col. 10, lines 35-50, which discloses an insured person's role on a specific case*);

(f) providing a second entity class that establishes in the data structure on the one or more computer readable memories:

relationships between the risk data objects, the account data objects the customer data objects, the product data objects and the service data objects (*see fig. 2, which discloses establishing relationship among data objects*);

(g) providing a program entity class that establishes in the data structure on the one or more computer readable memories relationships between the service data objects, the product data objects and the risk data objects (*col. 2, lines 35-45, which discloses program modules; col. 22, lines 15-30, which discloses program modules connected to single group insurance relational database ...which contains all of the data concerning each account or case and is structured in relational database model....*);

wherein the risk data objects define risk factors associated with addressing risks to customers and accounts, comprising risk factors addressed by products; and risk factors addressed by services;

wherein the account entity class, the customer entity class, the account involvement entity class, the account involvements, and the account role entity class are established to form multiple concise account level decision relationships used to construct multiple concise account level decision queries used to perform account level decision analysis (*see fig. 2, which discloses entity relationship model; col. 2, lines 50-65, which discloses that the relationships between entities are also identified and documented in the table format and entered into entity-to-entity relationship tables; col. 3, lines 5-15, which discloses that the entities and relationships are then analyzed so as to produce a second level model*);

(h) constructing multiple concise account level decision queries using the multiple concise account level decision relationships (*col. 3, lines 5-15, which discloses that the entities and relationships are then analyzed so as to produce a second level model*)

(i) performing account level decision analysis comprising:

executing data queries with a processor that reads the multiple concise account level decision queries from the data structure on the one or more computer readable memories (*col. 3, lines 5-15, which discloses that the entities and relationships are then analyzed so as to produce a second level model*).

44. Guy discloses

a second account role for the first customer data object with respect to the first account ID, the second account role different from the first account role, for establishing multiple different roles for the customer identified by the first customer ID with respect to the account ID identified by the first account ID (*see fig. 2, which discloses multiple*

different roles for a customer...; col. 4, lines 15-60; col. 4, lines 15-60, which discloses ...assigning a "role" to each cardholder. The roles may be relatively simple, such as "primary" and "secondary"....the customer ID and the presentation ID stored in the database 130 permit the roles for cardholders to be defined not only for each account, but also for all accounts for which a card has been issued to one customer...);

45. Hele et al discloses:

providing a first entity class that establishes in the data structure on the one or more computer readable memories:

multiple risk data objects (*see fig. 7; 0061, which discloses user risk; 0080, which discloses risk associated with insuring a particular user; 00083 which discloses risk in determination of premium*);

multiple product data Objects (*see fig. 7; 0061, which discloses user risk; 0080, which discloses risk associated with insuring a particular user; 00083 which discloses risk in determination of premium*); and

multiple service data objects (*see fig. 7; 0061, which discloses user risk; 0080, which discloses risk associated with insuring a particular user; 00083 which discloses risk in determination of premium*);

providing a second entity class that establishes:

wherein the risk data objects define risk factors associated with addressing risks to customers and accounts, comprising risk factors addressed by products; and risk factors addressed by services (*see fig. 7; 0061, which discloses user risk; 0080, which*

discloses risk associated with insuring a particular user; 00083 which discloses risk in determination of premium).

Accordingly it would have been obvious to one of ordinary skill in the art at time of applicant's invention to modify the method of Dimitrios et al and incorporate the method, wherein the an account role entity class for establishing an account role entity that defines: a first account role for the first data object; and a second account role for the first customer data object different from the first account role, for establishing multiple different roles for a customer identified by the customer ID with respect to multiple different accounts identified by the account IDs along with the risk associated in view of the teachings of Bosco et al, Guy and Hele respectively since the claimed invention is merely a combination of old and known elements and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

46. As per claim 27, both Dimitrios et al and Bosco et al failed to explicitly disclose the method, further comprising:

providing an entity where the first set of instructions executed by the processor cause the processor to store risk information that defines risk factors related to any one of the account data objects, the customer data objects, the product data objects or the service data objects, comprising:

risk trends; risk exposures; risk assessments; and risk capacity.

Hele discloses the method, further comprising:

providing an entity for storing risk information that defines risk factors related to any one of the account data objects, the customer data objects, the product data objects or the service data objects, comprising:

risk trends; risk exposures; risk assessments; and risk capacity (0061, which discloses user risk; 0080, which discloses risk associated with insuring a particular user; 00083 which discloses risk in determination of premium).

Accordingly it would have been obvious to one of ordinary skill in the art at time of applicant's invention to modify the method of Dimitrios et al and incorporate the method, comprising risk trends; risk exposures; risk assessments; and risk capacity in view of the teachings of Hele because so that the risk associated with the account may be ascertained.

47. As per claim 29, both Dimitrios et al and Bosco et al failed to explicitly disclose the method further comprising:

providing an entity class that establishes relationships between the account data objects, the customer data objects and the risk data objects, wherein the risk data objects define risk factors, comprising:

risk factors relevant to minimizing risk for accounts; and

risk factors relevant to minimizing risk for customers.

Hele disclose the method further comprising:

providing an entity class that establishes relationships between the account data objects, the customer data objects and the risk data objects, wherein the risk data objects define risk factors, comprising:

risk factors relevant to minimizing risk for accounts (0061, which discloses user risk; 0080, which discloses risk associated with insuring a particular user; 00083 which discloses risk in determination of premium); and

risk factors relevant to minimizing risk for customers (0061, which discloses user risk; 0080, which discloses risk associated with insuring a particular user; 00083 which discloses risk in determination of premium).

Accordingly it would have been obvious to one of ordinary skill in the art at time of applicant's invention to modify the method of Dimitrios et al and incorporate the method, comprising risk factors relevant to accounts; and risk factors relevant to customers in view of the teachings of Hele because so that the risk associated with the account may be ascertained.

48. As per **claim 30**, both Dimitrios et al and Bosco et al failed to explicitly disclose the method, wherein at least one relationship between the customer data objects and the risk data objects defines multiple risk factors.

Hele discloses the method, wherein at least one relationship between the customer data objects and the risk data objects defines multiple risk factors (see fig. 7; 0061, which discloses user risk; 0080, which discloses risk associated with insuring a particular user; 00083 which discloses risk in determination of premium).

Accordingly it would have been obvious to one of ordinary skill in the art at time of applicant's invention to modify the method of Dimitrios et al and incorporate the method, wherein at least one relationship between the customer data objects and the risk data objects defines multiple risk factors in view of the teachings of Hele because so that the risk associated with the account may be ascertained.

49. As per claim 31, both Dimitrios et al and Bosco failed to explicitly disclose the method, further comprising:

providing a program entity class that establishes relationships between the service data objects, the product data objects and the risk data objects, wherein the risk data objects define risk factors, comprising:

risk factors addressed by products; and

risk factors addressed by services.

Hele discloses the method, further comprising:

providing a program entity class that establishes relationships between the service data objects, the product data objects and the risk data objects, wherein the risk data objects define risk factors, comprising:

risk factors addressed by products (0061, which discloses user risk; 0080, which discloses risk associated with insuring a particular user; 0083 which discloses risk in determination of premium; 0087, which discloses risk sensitive activities); and

risk factors addressed by services (0061, which discloses user risk; 0080, which discloses risk associated with insuring a particular user; 00083 which discloses risk in determination of premium; 0087, which discloses risk sensitive activities)

Accordingly it would have been obvious to one of ordinary skill in the art at time of applicant's invention to modify the method of Dimitrios et al and incorporate the method, comprising risk factors addressed by products; and risk factors addressed by services in view of the teachings of Hele because so that the risk associated with the account may be ascertained.

Conclusion

50. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Charles C.L. Agwumezie** whose number is **(571) 272-6838**. The examiner can normally be reached on Monday – Friday 8:00 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Calvin Hewitt can be reached on **(571) 272 – 6709**.

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Center (EBC) at 866-217-9197 (toll free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHARLES C AGWUMEZIE/
Primary Examiner, Art Unit 3685
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